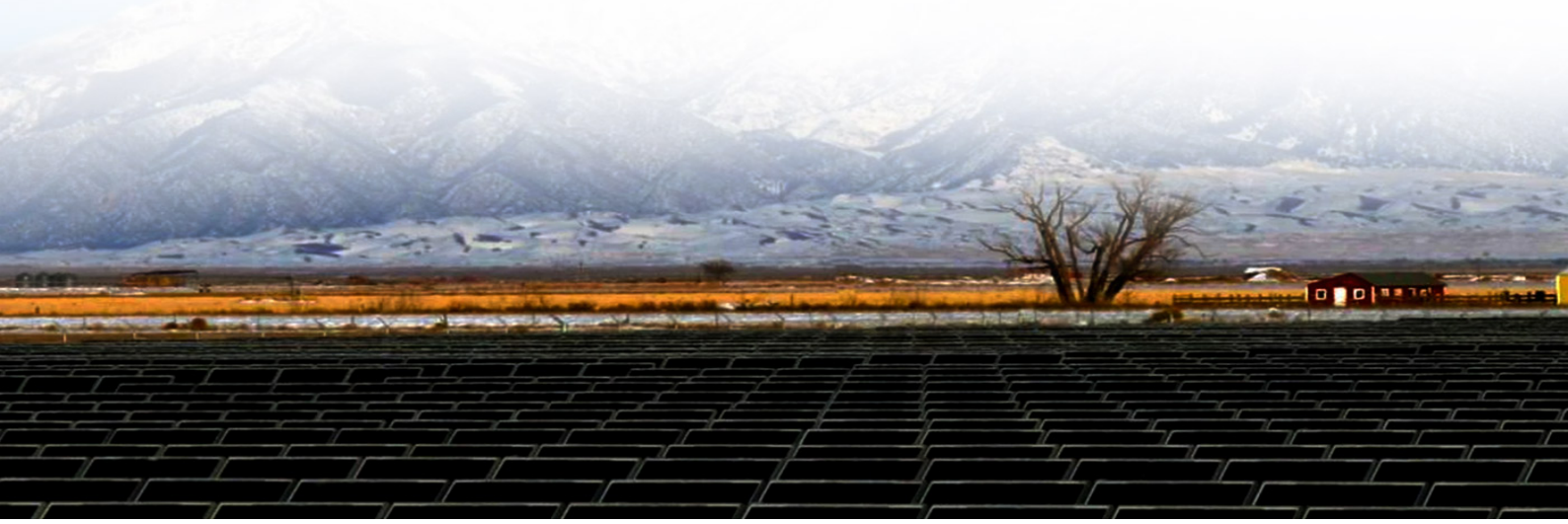
Base station three-dimensional communication



Overview

When UAVs function as emergency access points to furnish wireless connectivity in an unoccupied area, the optimization challenge involves minimizing the quantity of UAVs while enhancing their deployment positions and transmission power, taking into account realistic 3D air-to-ground.

When UAVs function as emergency access points to furnish wireless connectivity in an unoccupied area, the optimization challenge involves minimizing the quantity of UAVs while enhancing their deployment positions and transmission power, taking into account realistic 3D air-to-ground.

enhancement [5]–[7], communication relaying [8]–[10], and data broad-cast/collection [11]–[13]. Compared to conventional terrestrial communications with typically fixed infrastructures, UAV-assisted systems offer new degrees of freedom in the spati l domain to further improve communication.

ation are critical to improving the performance of wireless communication networks in terms of latency reduction. To this end, the article proposes leveraging a convolutio al neural network (CNN) to improve the accuracy of base station location selection and network latency reduction. The CNN.

To extend the coverage of traditional terrestrial communication networks and serve more diverse application scenarios, employing unmanned aerial vehicles (UAV) as aerial base stations has emerged as a viable solution. However, due to the mobility of users and the dynamic nature of UAV base stations.

The invention discloses a kind of 3-D positioning method based on radio communication base station, steps are as follows: 1) obtain base station BS coordinate, calculate mobile terminal MT to base station propagation time□2) one is chosen from all base station BSs be set to BS for target BS 1.

The observed values of time of arrival (TOA) for the radio signals between the target and the wireless communication base stations are mainly affected by signal non-line-of-sight (NLOS) propagation in target location. TOA with NLOS makes a lot of signal noises and propagation delays, i.e. location.

Abstract: Aiming at the problem that the indoor three-dimensional positioning

algorithm is complex and the accuracy is not high, this paper proposes a three-dimensional wireless positioning method based on symmetric Bluetooth base station. First, several groups of Bluetooth base stations are placed.

Base station three-dimensional communication

[Modified Least Squares Algorithm for Three-Dimensional ...]

In Section 4, we have a discussion on the base station selection strategy to get the minimum number of wireless communication base stations for 3D location. In Section 5, the ...

[Wireless Communication Base Station Location Selection ...]

presents a following method: location selection and network optimization for the wireless communication network. First, it collects the experimental data set of base station locati.

[Three-dimensional wireless positioning method based on ...]

Abstract: Aiming at the problem that the indoor three-dimensional positioning algorithm is complex and the accuracy is not high, this paper proposes a three-dimensional wireless positioning ...

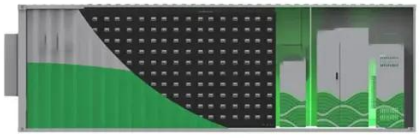
Dynamic 3-Dimensional Deployment of Unmanned Aerial Vehicle Base

To extend the coverage of traditional terrestrial communication networks and serve more diverse application scenarios, employing unmanned aerial

vehicles (UAV) as aerial base ...

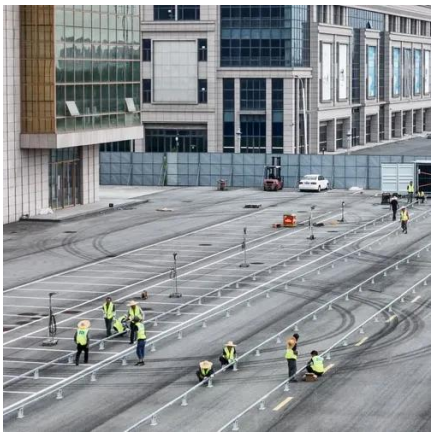
3D deployment of UAV-mounted base stations for

Recently, unmanned aerial vehicles (UAVs) have been reported a lot as aerial base stations (BSs) to assist wireless communication in Internet of Things (IoT). However, most ...



Efficient three-dimensional deployment of multiple ...

UAVs can be used as flying base stations without an infrastructure to improve coverage, capacity, line-of-sight (LoS) ...

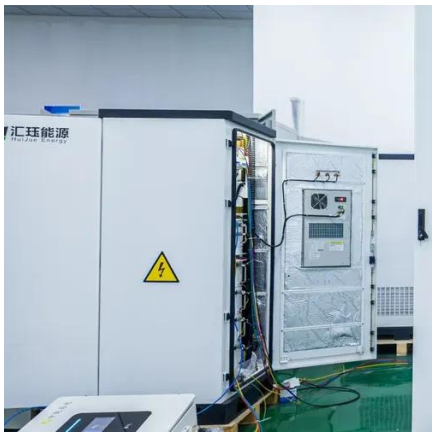


3-D Positioning and Resource Allocation for Multi-UAV Base ...

In this section, we provide simulation results to evaluate the performance of the proposed joint 3-D positioning and resource allocation scheme for multi-UAV communication networks aided by ...

Efficient three-dimensional deployment of multiple unmanned ...

UAVs can be used as flying base stations without an infrastructure to improve coverage, capacity, line-of-sight (LoS) connection, and rate performance in wireless ...



Modeling, Capacity Studies, Antenna and System Designs

The sixth generation (6G) and beyond 6G (B6G) wireless communication networks are expected to provide space-air-ground-sea global coverage. Base stations and users tend ...

CN106792516B

The present invention relates to mobile communication locating technology fields, in particular to a kind of three-dimensional localization based on radio communication base station

Three-Dimensional Model of the Radio Links Formation between ...

A three-dimensional model of the radio links formation between a base station (BS) of a mobile communication system and a ground user terminal with signal relaying through an unmanned ...

Dynamic 3-Dimensional Deployment of Unmanned Aerial Vehicle ...

To extend the coverage of traditional terrestrial communication networks and serve more diverse application scenarios, employing unmanned aerial vehicles (UAV) as aerial base ...

Three-Dimensional Model of the Radio Links Formation between the Base

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